

6570  
0415

#8



# ENTERED

OIPE

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/09/757,332A**

DATE: 04/14/2003  
 TIME: 14:56:11

Input Set : A:\EP.txt  
 Output Set: N:\CRF4\04142003\I757332A.raw

```

1 <110> APPLICANT: Achilefu, Samuel I.
2   Rajagopalan, Raghavan
3   Dorshow, Richard B.
4   Bugaj, Joseph E.
6   Mallinckrodt Inc.
8 <120> TITLE OF INVENTION: Hydrophilic Cyanine Dyes
10 <130> FILE REFERENCE: MRD-66
12 <140> CURRENT APPLICATION NUMBER: US 09/757,332A
13 <141> CURRENT FILING DATE: 2001-01-09
15 <150> PRIOR APPLICATION NUMBER: US 09/484,319
16 <151> PRIOR FILING DATE: 2000-01-18
18 <160> NUMBER OF SEQ ID NOS: 8
20 <170> SOFTWARE: Patent-In Version 3.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 8
24 <212> TYPE: PRT
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
W--> 28 <221> NAME/KEY: MOD RES
29 <222> LOCATION: (1)...(8)
30 <223> OTHER INFORMATION: Xaa at location 1 represents D-Phe. Artificial sequence
31   is completely synthesized.
32 <223> OTHER INFORMATION: Xaa at locations 2 and 7 represents Cys with an
33   intramolecular disulfide bond between two Cys
34   amino acids. Artificial sequence is completely
35   synthesized.
36 <223> OTHER INFORMATION: Xaa at location 4 represents D-Trp. Artificial sequence
37   is completely synthesized.
W--> 39 <400> 1
W--> 40   Xaa Xaa Tyr Xaa Lys Thr Xaa Thr
41     1           5
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 8
46 <212> TYPE: PRT
47 <213> ORGANISM: Artificial Sequence
49 <220> FEATURE:
W--> 50 <221> NAME/KEY: MOD RES
51 <222> LOCATION: (1)...(8)
52 <223> OTHER INFORMATION: Xaa at location 1 represents D-Phe. Artificial sequence
53   is completely synthesized.
54 <223> OTHER INFORMATION: Xaa at locations 2 and 7 represents Cys with an
55   intramolecular disulfide bond between two Cys
56   amino acids. Artificial sequence is completely

```

## RAW SEQUENCE LISTING

DATE: 04/14/2003

PATENT APPLICATION: US/09/757,332A

TIME: 14:56:11

Input Set : A:\EP.txt

Output Set: N:\CRF4\04142003\I757332A.raw

```

57      synthesized.
58 <223> OTHER INFORMATION: Xaa at location 4 represents D-Trp. Artificial sequence
59      is completely synthesized.
60 <223> OTHER INFORMATION: Xaa at location 8 represents Thr-OH. Artificial sequence
61      is completely synthesized.
W--> 63 <400> 2
W--> 64  Xaa Xaa Tyr Xaa Lys Thr Xaa Xaa
      65    1          5
      66 <210> SEQ ID NO: 3
      69 <211> LENGTH: 11
      70 <212> TYPE: PRT
      71 <213> ORGANISM: Unknown
      73 <220> FEATURE:
W--> 74 <221> NAME/KEY: MOD RES
      75 <222> LOCATION: (1)...(11)
      76 <223> OTHER INFORMATION: Bombesin analog
      78 <400> SEQUENCE: 3
      79  Gly Ser Gly Gln Trp Ala Val Gly His Leu Met
      80    1          5          10
      83 <210> SEQ ID NO: 4
      84 <211> LENGTH: 11
      85 <212> TYPE: PRT
      86 <213> ORGANISM: Unknown
      88 <220> FEATURE:
W--> 89 <221> NAME/KEY: MOD RES
      90 <222> LOCATION: (1)...(11)
      91 <223> OTHER INFORMATION: Bombesin analog
      93 <400> SEQUENCE: 4
      94  Gly Asp Gly Gln Trp Ala Val Gly His Leu Met
      95    1          5          10
      98 <210> SEQ ID NO: 5
      99 <211> LENGTH: 8
     100 <212> TYPE: PRT
     101 <213> ORGANISM: Unknown
     103 <220> FEATURE:
W--> 104 <221> NAME/KEY: MOD RES
     105 <222> LOCATION: (1)...(8)
     106 <223> OTHER INFORMATION: Cholecystokinin octapeptide analogs
     108 <400> SEQUENCE: 5
     109  Asp Tyr Met Gly Trp Met Asp Phe
     110    1          5
     113 <210> SEQ ID NO: 6
     114 <211> LENGTH: 8
     115 <212> TYPE: PRT
     116 <213> ORGANISM: Artificial Sequence
     118 <220> FEATURE:
W--> 119 <221> NAME/KEY: MOD RES
     120 <222> LOCATION: (1)...(6)
     121 <223> OTHER INFORMATION: Xaa at locations 3 and 6 represents Norleucine.

```

## RAW SEQUENCE LISTING

DATE: 04/14/2003

PATENT APPLICATION: US/09/757,332A

TIME: 14:56:11

Input Set : A:\EP.txt

Output Set: N:\CRF4\04142003\I757332A.raw

```

122      Artificial sequence is completely synthesized.
124 <400> SEQUENCE: 6
W--> 125  Asp Tyr Xaa Gly Trp Xaa Asp Phe
126      1          5
127 <210> SEQ ID NO: 7
128 <211> LENGTH: 8
129 <212> TYPE: PRT
130 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
W--> 133 <221> NAME/KEY: MOD RES
134 <222> LOCATION: (1)...(8)
137 <223> OTHER INFORMATION: Xaa at location 1 represents D-Asp. Artificial sequence
138      is completely synthesized.
139 <223> OTHER INFORMATION: Xaa at locations 3 and 6 represents Norleucine.
140      Artificial sequence is completely synthesized.
W--> 142 <400> 7
W--> 143  Xaa Tyr Xaa Gly Trp Xaa Asp Phe
144      1          5
147 <210> SEQ ID NO: 8
148 <211> LENGTH: 8
149 <212> TYPE: PRT
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
W--> 153 <221> NAME/KEY: MOD RES
154 <222> LOCATION: (1)...(8)
155 <223> OTHER INFORMATION: Xaa at location 1 represents D-Lys. Artificial sequence
156      is completely synthesized.
158 <400> SEQUENCE: 8
W--> 159  Xaa Pro Arg Arg Pro Tyr Ile Leu
160      1          5

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/757,332A

DATE: 04/14/2003  
TIME: 14:56:12

Input Set : A:\EP.txt  
Output Set: N:\CRF4\04142003\I757332A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,2,4,7  
Seq#:2; Xaa Pos. 1,2,4,7,8  
Seq#:6; Xaa Pos. 3,6  
Seq#:7; Xaa Pos. 1,3,6  
Seq#:8; Xaa Pos. 1

## VERIFICATION SUMMARY

DATE: 04/14/2003

PATENT APPLICATION: US/09/757,332A

TIME: 14:56:12

Input Set : A:\EP.txt

Output Set: N:\CRF4\04142003\I757332A.raw

L:28 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:39 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1  
L:40 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:50 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2  
L:63 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2  
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:74 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3  
L:89 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4  
L:104 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:5  
L:119 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6  
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:133 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7  
L:142 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7  
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:153 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8  
L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0